

PDR RID Report

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Document PDR

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| RID ID | PDR | 13 |
| Review | FOS | |
| Originator Ref | | N/A |
| Priority | 2 | |

Section N/A

Page N/A

Figure Table N/A

Category Name Design

Actionee HAIS

Sub Category

Subject Expandability for future common spacecraft.

Description of Problem or Suggestion:

The PDR presentation did not demonstrate the system design can be evolved to handle the subsequent missions, e.g., PM1, CHEM1, AM2, in a cost effective way.

Originator's Recommendation

FOS should conduct a study for how the current system design to evolve to Release C, and to demonstrate that that is the most cost effective way. This requires the contractor to understand the basics of common spacecraft operations.

GSFC Response by:

GSFC Response Date

HAIS Response by: D. Herring

HAIS Schedule 1/13/95

HAIS R. E. A. Miller

HAIS Response Date 1/18/95

The FOS design is based on providing an architecture that can be scaled to support future missions. Thus, the FOS can add User Stations and, if applicable, servers to the EOC hardware to support future missions. The software design can be extended using the object oriented principles of inheritance and encapsulation that foster software reuse. It is anticipated that a large percentage of the application software can be reused on future missions augmented with mission-specific software. This approach to reuse has been proven on previous heritage missions including PORTS (NASA), GIMTACS and PACS (NOAA), and N-STAR (commercial), as well as on the TPOCC program. Although the extension of the FOS to subsequent missions was not emphasized at the AM-1 oriented PDR, it is inherent in the architecture and design, and no special study is needed.

Status **Closed**

Date Closed 2/1/95

Sponsor Johns

***** Attachment if any *****